

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An optical recording medium capable of being recorded and/or reproduced thereon with laser light of 390 to 420 nm incident upon a light transmitting layer surface, comprising at least:

a supporting substrate;

a recording layer on the supporting substrate, the recording layer containing an organic compound as a major component;

a dielectric layer on the recording layer; and

a light-transmitting layer on and directly in contact with the dielectric layer, the light-transmitting layer having a thickness of 1 to 150 μm and being capable of transmitting laser light with a wavelength of 390 to 420 nm for recording and reproducing information,

wherein the organic compound in the recording layer includes a trimethine cyanine dye that has the minimum value n_{min} of its refractive index n (real part of the complex refractive index) within the range of 370 to 425 nm and has a refractive index n of 1.2 or lower with respect to the wavelength of the recording/reproducing laser light, and the organic compound, when absorbing the laser light, melts or degrades to bring about a change in the refractive index, thereby effecting recording of the information and wherein the trimethine cyanine dye contains a trimethine chain with two nitrogen-containing heterocyclic rings positioned on ends of the trimethine chain, one of the two nitrogen-containing heterocyclic rings being benzoxazole and the other of the two heterocyclic rings being selected from the group consisting of benzoxazole, benzimidazole and indolenine,

wherein lands and grooves are formed on the supporting substrate with the grooves being 60 to 150 nm in depth, and

wherein only the land area serves as a recording area.

Claim 2 (Original): The optical recording medium according to claim 1, wherein, at the wavelength of the reproducing laser light, the melting or the degradation of the organic compound causes an increase in the refractive index n of the organic compound.

Claim 3 (Original): The optical recording medium according to claim 1, wherein the organic compound has an extinction coefficient k (imaginary part of the complex refractive index) of 0.15 or above, with respect to both the wavelength of the recording laser light and the wavelength of the reproducing laser light.

Claim 4 (Canceled).

Claim 5 (Currently Amended): The optical recording medium according to claim 1, wherein the ~~trimethine cyanine dye contains a trimethine chain with two nitrogen-containing heterocyclic rings positioned on ends of the trimethine chain, the two nitrogen-containing heterocyclic rings being identical to one another~~ other of the two heterocyclic rings being benzoxazole.

Claim 6 (Original): The optical recording medium according to claim 1, wherein the recording layer contains, in addition to the organic compound, a quencher.

Claim 7 (Currently Amended): An optical recording/reproducing method, comprising the steps of:

providing an optical recording medium comprising at least a supporting substrate; a recording layer on the supporting substrate, the recording layer containing an organic

compound as a major component; a dielectric layer on the recording layer; and a light-transmitting layer on and directly in contact with the dielectric layer, the light-transmitting layer having a thickness of 1 to 150 μm and being capable of transmitting laser light with a wavelength of 390 to 420 nm for recording and reproducing information, wherein the organic compound in the recording layer includes a trimethine cyanine dye that has the minimum value n_{\min} of its refractive index n (real part of the complex refractive index) within the range of 370 to 425 nm and has a refractive index n of 1.2 or lower with respect to the wavelength of the recording/reproducing laser light, and the organic compound, when absorbing the laser light, melts or degrades to bring about a change in the refractive index and wherein the trimethine cyanine dye contains a trimethine chain with two nitrogen-containing heterocyclic rings positioned on ends of the trimethine chain, one of the two nitrogen-containing heterocyclic rings being ~~selected from the group consisting of benzoxazole~~, and the other of the two heterocyclic rings being selected from the group consisting of benzoxazole, benzimidazole and indolenine;

irradiating a recording laser light of 390 to 420 nm onto the optical recording medium from the light-transmitting layer side thereof to effect recording of the information, whereupon the refractive index n of the organic compound with respect to the wavelength of reproducing laser light of 390 to 420 nm is raised in the area irradiated with the recording laser light; and

subsequent to the recording step, irradiating the reproducing laser light of 390 to 420 nm onto the optical recording medium from the light-transmitting layer side thereof to effect reproducing of the information

wherein lands and grooves are formed on the supporting substrate with the grooves being 60 to 150 nm in depth, and

wherein only the land area serves as a recording area.

Claim 8 (Previously Presented): The optical recording medium according to claim 1, wherein the organic compound in the recording layer has an extinction coefficient k (imaginary part of the complex refractive index) of 0.15 or above with respect to the wavelength of both the recording and reproducing laser light.

Claim 9 (Previously Presented): The optical recording medium according to claim 1, wherein the dielectric layer has refractive index n_4 (real part of the complex refractive index) of 2 or higher and an extinction coefficient k_4 (imaginary part of the complex refractive index) of 0.2 or lower with respect to the wavelength of the recording/reproducing laser light.

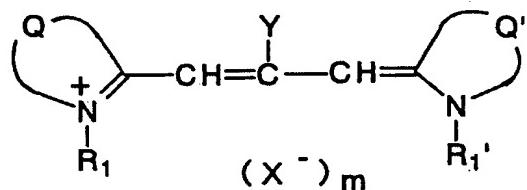
Claim 10 (Previously Presented): The optical recording medium according to claim 1, wherein the refractive index n is 1.1 or lower with respect to the wavelength of the recording/reproducing laser light.

Claim 11 (Previously Presented): The optical recording medium according to claim 10, wherein the refractive index n is 1.0 or lower with respect to the wavelength of the recording/reproducing laser light.

Claim 12 (Previously Presented): The optical recording medium according to claim 8, wherein the extinction coefficient k (imaginary part of the complex refractive index) is in the range of 0.3 to 0.95 with respect to the wavelength of both the recording and reproducing laser light.

Claim 13 (Previously Presented): The optical recording medium according to claim 12, wherein the extinction coefficient k (imaginary part of the complex refractive index) is in the range of 0.4 to 0.8 with respect to the wavelength of both the recording and reproducing laser light.

Claim 14 (Previously Presented): The optical recording medium according to claim 1, wherein the trimethine cyanine dye has the following general formula (I):



(I)

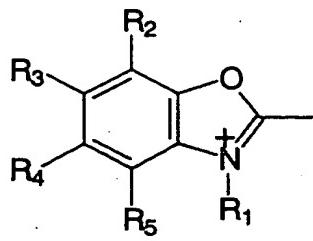
wherein

Y represents a hydrogen atom, a halogen atom, a lower alkyl group, or a phenyl group;

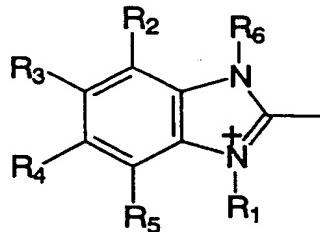
X⁻ represents an anion, which is a halogen ion, ClO₄⁻, BF₄⁻, PF₆⁻, SbF₆⁻, or SCN⁻;
m is 0 or 1;

the Q-containing ring has the following formula (A), and the Q'-containing ring has one of the following formulae (A), (B) or (C):

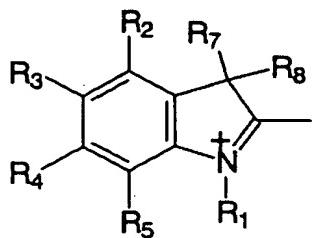
(A)



(B)



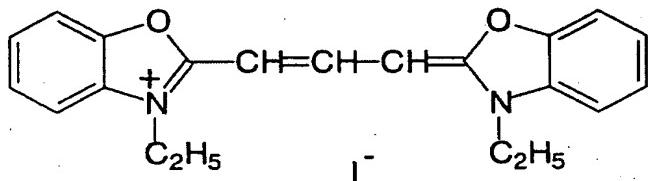
(C)



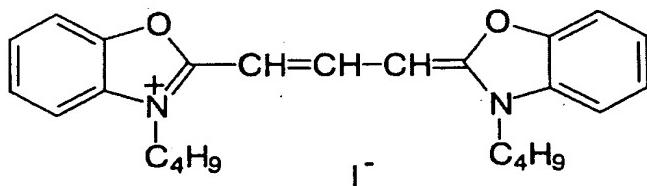
wherein R₁ is a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; R₂, R₃, R₄ and R₅ may or may not be identical to one another and each independently represent a hydrogen atom, alkyl group, nitro group, alkoxy group, or a halogen atom; R₆ represents a methyl or ethyl group; R₇ and R₈ may or may not be identical to one another and each independently represent a methyl or ethyl group.

Claim 15 (Previously Presented): The optical recording medium according to claim 14, wherein the trimethine cyanine dye is selected from the group consisting of

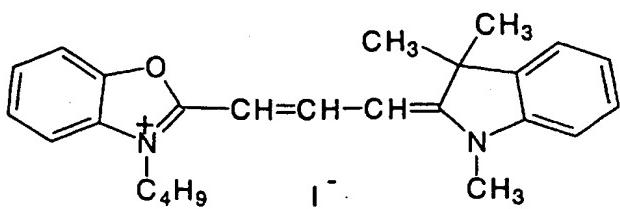
AA-1



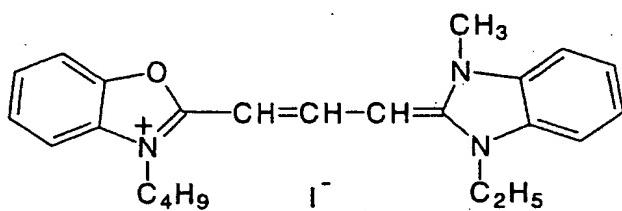
AA-2



AC-1



AB-1



Claim 16 (Previously Presented): The optical recording medium according to claim 1, wherein the recording layer and the supporting substrate are adjacent to each other.

DISCUSSION OF THE AMENDMENT

Claim 1 has been amended to make explicit what was at least previously implicit, i.e., that the light-transmitting layer is directly in contact with the dielectric layer, as supported in the specification at page 37, lines 1-5, and the Figure; by inserting that the light-transmitting layer has a thickness of 1 to 150 μm , as supported in the specification at page 35, lines 15-18; by inserting that the medium is capable of being recorded and/or reproduced thereon with laser light incident upon the light transmitting layer surface, as supported in the specification at page 11, lines 5-8; by inserting that lands and grooves are formed on the supporting surface with the grooves being 60 to 150 nm in depth, as supported in the specification at page 8, lines 6-9; and by inserting that only the land area serves as the recording area, as supported in the specification at page 8, lines 9-11.

Claim 7 has been amended to be consistent with the amendment to Claim 1.

Finally, Claim 5 has been rewritten, but without changing its scope.

No new matter is believed to have been added by the above amendment. Claims 1-3 and 5-16 remain pending in the application.